

What is the difference between verification and validation?

verification->are we building the product right?

purpose: to check the required software meets the business requirement and specified requirements

focus: its focus on the process used to built the product.

activities: reviews, desk checking, desk walkthrough, and inspections

performed during: early stage of SDLC like requirement analysis, design phases.

Validation-> are we building the right product?

Purpose: to validate the software meets the business

Focus: it focuses on the final product

Activities: functional testing, system testing, User acceptance testing(UAT) etc

Performed during: after the full development completes.

What are the different levels of testing?

There are mainly four levels of testing:

unit testing

integration testing

system testing

acceptance testing

Explain the difference between functional and non-functional testing.

Functional testing: It ensure the software meets end user perspective by testing user interaction, works as per business needs and expectations, logical workflow like elements are working properly.

Non-functional testing: After the functional test, the main goal is to ensure whether it works as expected based on certain conditions like performance, usability, observability, compatibility, security and reliability. Meaning testing in presence of real world distractions.

Functional testing	Non-functional Testing
What the system does - rather than how it does it.	How the system performs under certain conditions like performance, etc.
Focus entirely on features, functionality, etc	Focus on performance(load, stress, soak and spike), usability, etc.

What is regression testing and when is it performed?

Regression testing is performed to ensure after recent code change or enhancement has no negative impact on the existing functionality of the software. it main goal is to catch intendent side effects due to bug fixes, code changes and configuration changes.

It is mostly performed after a phase when there is need to check functionalities and its related areas still working properly or not. Or after the sanity testing which is the subset of regression testing. sanity testing is use to reduce the amount of resources for the broken build saves time and money.

What is the purpose of a test case?

It is use to validate or to store the history of the system, based on provided input, environment setup, and its corresponding output(by attachments like images, etc).

Write the key components of a good test case.

Key components are:

Test case ID

Title

Pre-conditions

Input Data

Steps

Actual Result

Expected Result

Priority

Severity

Performed By

Attachments

Remark/comments

What is a test plan and what are its key elements?

Test plan is usually prepared by the test lead or QA Manager.

Test plan enables a clear scope on what(or when or how) to test, who will test, making the QA team knowing their responsibilities, what tests has been performed, and other important details during the test.

Key components are:

1. Test plan id
2. Introduction/objective
3. Scope of testing
4. Features to be tested
5. Features not to be tested
6. Test strategy
7. Entry and exit criteria
8. Roles and responsibility
9. Tools used
10. Approval

Explain the difference between severity and priority with an example

Severity refers to the impact of the defect on the functionality of application.

priority refers to the order in which the defect should be fixed, based on business needs. Severity is usually decided by the QA team. Where as priority is decided by the Product owner/Project manager.

Example:

When login button not working properly:

Severity: Placed High, major functionality broken.

Priority:

High: when the deadline is nearer

Low: If code is not still created

What is a bug life cycle / defect life cycle?

It enables to track the bug effectively by developers and testers until the bug is closed. Where the bug starts from new (where the bug initializes and placed in tracking tool) towards the closure of bug.

What are positive and negative test cases?

Positive test cases are where users provide valid credentials to check its functionality and vice versa for negative test cases.

If a login button doesn't work, how will you report it?

Better to ask evidences, speak professionally, speak politely for better discussion to clear the bug. Reporting it by bug report:

Field	Example Entry
Bug ID	BUG_001 (auto-generated by tool)
Title / Summary	Login button not responding on the Login page
Description	When the user enters valid credentials and clicks the Login button, nothing happens. The page doesn't redirect or display an error message. The issue occurs on both Chrome and Firefox browsers.
Steps to Reproduce	<ol style="list-style-type: none">1. Navigate to the Login page.2. Enter a valid username and password.3. Click the Login button.4. Observe that nothing happens.
Expected Result	The user should be redirected to the dashboard after successful login.
Actual Result	Nothing happens after clicking the Login button — no redirection or error message displayed.
Severity	High (Blocks user from logging in)

Priority	Critical (Needs immediate fix)
Environment	OS: Windows 11 Browser: Chrome v128, Firefox v121 App Version: v2.1.0
Attachments	Screenshot and video recording (if available).
Reported By	Routh Kiran Babu
Assigned To	Developer Name
Status	New / Open

A website takes 15 seconds to load — what will you check first?

First Check: Internet & Environment

Next: Use Browser Developer Tools (F12 → Network Tab)

Backend / Server Checks

Content & Asset Optimization

Performance Testing Tools

How would you test a calculator app's “divide by zero” functionality?

Field	Details
Test Case ID	TC_DIV_001
Test Scenario	Verify that the calculator handles “divide by zero” correctly
Test Steps	1. Open the Calculator app 2. Enter $10 \div 0$ 3. Press the = button
Expected Result	Calculator should display a proper message like: - “Cannot divide by zero” - “Error” OR gracefully handle the exception without crashing
Actual Result	<i>To be filled after execution</i>
Status	Pass / Fail

Severity High (can crash the app if not handled properly)

Priority High (core functionality)

What test cases will you write for a “Forgot Password” feature?

✓ Positive Test Cases

TC ID	Test Scenario	Test Steps	Expected Result
TC_FP_001	Verify Forgot Password link is visible and clickable	Navigate to Login page → Click “Forgot Password”	Forgot Password page should open
TC_FP_002	Verify user can enter a registered email	Enter a valid registered email → Click Submit	System should display message: “Password reset link sent to your email.”
TC_FP_003	Verify password reset link works	Open received email → Click reset link	User should be redirected to password reset page
TC_FP_004	Verify user can set a new valid password	Enter new valid password and confirm it	Password should be updated successfully; user redirected to login page
TC_FP_005	Verify success message after password reset	Reset password successfully	System shows confirmation message “Your password has been reset.”
TC_FP_006	Verify user can log in with new password	Try logging in with new password	Login should succeed; old password should no longer work

✗ Negative Test Cases

TC ID	Test Scenario	Test Steps	Expected Result
TC_FP_007	Enter an unregistered email	Enter an email not in system	Error message: “Email not found”

TC_FP_008	Leave email field blank	Leave blank → Click Submit	Error message: "Email is required"
TC_FP_009	Enter invalid email format	Enter <code>abc@</code> → Click Submit	Error message: "Invalid email format"
TC_FP_010	Click expired password reset link	Open expired link from email	Error message: "Link has expired"
TC_FP_011	Click already used reset link	Use same reset link twice	Error message: "Link already used"
TC_FP_012	Enter mismatched passwords	Enter new and confirm passwords that don't match	Error message: "Passwords do not match"
TC_FP_013	Enter weak password (e.g., "123")	Enter weak password → Submit	Error message: "Password too weak"
TC_FP_014	Close reset page mid-way	Enter email → don't complete process	No reset should happen; old password should remain valid
TC_FP_015	Check SQL injection or script input	Try entering <code>abc@gmail.com'</code> OR <code>'1'='1</code>	System should sanitize input and show proper error message

What will you do if you find a defect but the developer marks it as "Not a Bug"?

Recheck the Defect

Collect Evidence

Communicate Professionally

Involve the Test Lead or Business Analyst (if needed)

Update the Defect Status Accordingly

Write 5–10 test cases covering functional, UI, and negative scenarios

Functional Test Cases

TC ID	Test Scenario	Steps	Expected Result
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TC_OHRM_001	Verify login with valid credentials	Enter valid username and password → Click “Login”	User should be redirected to the Dashboard page
TC_OHRM_002	Verify login with invalid credentials	Enter invalid username or password → Click “Login”	System should display error message: “Invalid credentials”
TC_OHRM_003	Verify login with blank username and password	Leave both fields empty → Click “Login”	System should display error message: “Required” under both fields
TC_OHRM_004	Verify Forgot Password link functionality	Click on “Forgot your password?”	User should be navigated to the “Reset Password” page
TC_OHRM_005	Verify successful logout	Login with valid credentials → Click on profile → Select “Logout”	User should be redirected to the Login page

UI Test Cases

TC ID	Test Scenario	Steps	Expected Result
TC_OHRM_006	Verify alignment and presence of login page elements	Open the OrangeHRM login page	“Username”, “Password”, “Login” button, and “Forgot your password?” link should be visible and properly aligned
TC_OHRM_007	Verify OrangeHRM logo is displayed correctly	Open login page	OrangeHRM logo should appear at the top of the page
TC_OHRM_008	Verify page responsiveness on different devices	Open the login page on desktop, tablet, and mobile	Page layout should adjust properly without overlapping elements
TC_OHRM_009	Verify color, font, and button consistency	Inspect “Login” button and text	Colors and fonts should match the OrangeHRM theme and be readable

✗ Negative Test Cases

TC ID	Test Scenario	Steps	Expected Result
TC_OHRM_010	Verify login with blank username	Leave username empty → Enter valid password → Click "Login"	Error message: "Required" under username field
TC_OHRM_011	Verify login with blank password	Enter valid username → Leave password empty → Click "Login"	Error message: "Required" under password field
TC_OHRM_012	Verify login with SQL injection	Enter <code>admin' OR '1'='1</code> as username and password	System should not log in; should show "Invalid credentials"
TC_OHRM_013	Verify login with extra spaces in username or password	Enter username with spaces before/after (e.g., " admin ") → Click Login	System should trim spaces and log in successfully
TC_OHRM_014	Verify case sensitivity of username and password	Enter username or password in uppercase	System should show "Invalid credentials" if case sensitivity applies

Identify at least 3 bugs or usability issues.

In the about section, company name may be OrangeHRM not apple HRM

About

Company Name:	apple HRM
Version:	OrangeHRM OS 5.7
Active Employees:	167
Employees	0
Terminated:	

Report on Bug Report:

Bug ID: 1

Title: Issue with COmpany name

Steps to Reproduce : Log in to the page

Expected Result: Ensuring company name is OrangeHRM

Actual Result: Showcasing apple HRM

Severity & Priority: Low, Priority: May be high

Screenshot:

About

Company Name:	apple HRM
Version:	OrangeHRM OS 5.7
Active Employees:	167
Employees	0
Terminated:	

Perform exploratory testing for 15–20 minutes.

Within 10 minutes gone through login and about sections. To find the bug.

During the bug capturing, exploratory testing must have preplanned work, understand the website, making mindmap, and where learning takes place simultaneously during the testing.